



Australia: Packaging Materials

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Summary

- Australia is a US\$6.2 billion market for packaging. Both the total market and value of American imports are forecast to increase.
- Australia has significant and growing food and beverage production, and these are the major end-users of packaging materials.
- Cartons, bottles, cans, plastic containers, and converted packaging are leading products, but Australia has embraced “green” packaging.
- Australia’s domestic food, beverage, and pharmaceutical industries are the major end-users of cartons, bottles, cans, plastic containers, and other converted packaging materials.

Locally produced materials significantly provide the demand generated within the Australian packaging industry. The market is dominated by three major manufacturers: Amcor, Visy Industries, and ACI. There is, however, a certain margin opening for import growth, dictated by technologically advanced materials, design, and pricing. In 2006, China was the main overseas supplier, followed by New Zealand, the U.S., and Malaysia.

Plastic is the fastest growing packaging material and is predicted to further increase its share of the total packaging market. The market requirement for PET (polyethylene terephthelate) containers for products other than beverages continues to increase. Stand-up pouches, spouted pouches, and sachets are gaining ground and the key appears to be resealing ability. Packaging materials with recyclable and/or biodegradable properties also present ongoing interests.

Market Demand

The packaging market in Australia is well developed and a complete range of packaging materials are made and converted in this country. The food, beverage, and pharmaceutical industries are the major end-users of cartons, bottles, cans, plastic containers, and other converted packaging materials.

The value of packaging (excluding machinery) produced in Australia is around A\$7.8 billion (US\$6.2 billion). Approximately 35,000 people are directly employed in the production of packaging in Australia. By international standards, the Australian market is a small part of world packaging. Imports in 2006 were valued at A\$781.6 million (US\$590.8 million), with China, New Zealand, the U.S., and Malaysia the leading sources.

Major packaging materials used in Australia are paperboard, plastic, metal, and glass. Paperboard packaging is the largest single material, constituting about 36 percent of the Australian packaging market. Plastic (HDPE, PET, PVC, polypropylene, and polystyrene) has gained market share to be the second largest sector at 30 percent. Metal packaging accounts for 20 percent, with glass at 10 percent. Other types of packaging make up the remainder.

Consumers are demanding more from packaging – convenience, differing product sizes, easy opening and reclose, tamper evident and child resistant closures, cook-in packs, portion control, respect for the environment, and minimal cost for packaged products. While consumers want convenience, they also want freshness. Sales of products in modified atmosphere packaging and vacuum shrink bags are gaining ground, as are other products to extend shelf life such as laser micro-perforated films. As a result of consumer demand for visual tamper-evidence, pharmaceutical packaging features including gas sensing dyes and optically variable films have emerged.

Australians are concerned about the environment. In recent times, these concerns have increased with issues such as climate change, greenhouse gases, water shortages, and energy usage. Environmental impact remains an important issue for packaging supply chain companies and steady progress has been made in balancing the social, economic, and environmental components of sustainability. All sectors are contributing to programs and initiatives that minimize the adverse environmental effects of packaging. The National Packaging Covenant is at the forefront of efforts to increase the amount of recyclable and biodegradable material used in packaging. The Covenant is a voluntary self-regulatory initiative by Government, industry, and non-industry organizations. Overall, the packaging industry in Australia has a strong record on recycling and the use of recycled content in packaging is now widespread, through voluntary action and regulatory backup.

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) helps industry meet growing consumer and regulator demands for smarter product packaging. Some technologies researched by CSIRO are:

- ❑ *Natural Packaging:* Instead of relying on oil-based packaging materials, research programs have looked at packaging that can be made with natural polymers such as proteins, starch, sugars or fatty acids. The goal is packaging products that are combustible, compostable, renewable, and carbon-dioxide neutral.
- ❑ *Smart Packaging:* Packaging that has the potential for sensing, monitoring, and indicating. For example, packaging that changes color with temperature beeps when it is nearing its use-by date.
- ❑ *Packaging Materials:* 'Nano coatings' for glass bottles for preserving the quality of food and beverage products by shielding them from damaging light waves, thus improving their shelf life. Also security packaging, unique seals and embedded optical effects that will indicate if the product within has been tampered with prior to purchase.

Market Data

ESTIMATED MARKET FOR PACKAGING MATERIALS - AUSTRALIA IN U.S. DOLLARS (in 000's)

	<i>2005</i>	<i>2006</i>	<i>2007 (estimated)</i>
Total Market Size	5.743.6	6.112.0	6.723.5
Total Local Production	5.362.0	5.670.0	6.240.0
Total Exports	166.5	148.8	160.6
Total Imports	548.2	590.8	644.1
Imports from the U.S.	53.9	56.1	61.2

Source: Australian Bureau of Statistics/World Trade Atlas and Industry Estimates

Exchange Rate Used:

A\$1 equals U.S. cents 76.6 75.6 80.0

Estimated Future Inflation Rate: 2-3 percent

Principal 2006 Import Market Shares

China	46.6 percent
New Zealand	13.1 percent
U.S.	9.5 percent
Malaysia	8.4 percent

Best Prospects

Plastic is the fastest growing material and is expected to further increase its share of the total packaging market. The demand for PET (polyethylene terephthalate) containers, other than beverages, continues to increase. Benefits of PET for glass replacement are seen to include being shatterproof and the ability to provide clarity as good as glass.

With food, flexible packaging is still gaining ground, especially in stand-up pouches, spouted pouches, and sachets. Here the key appears to be resealing ability. Oxygen scavenging technologies have been developed to reduce or eliminate the deleterious effects of oxygen on food products. In recent years, rigid plastics have shown a higher growth rate than other plastic materials and in packaging such as glass, metal containers and cans, and paperboard.

In beverage packaging, there is renewed interest in recyclable aluminum cans for alcohol beverages and canned wine has recently been introduced on the Australian market. Wine in a can is considered to offer excellent shelf stability, is easily chilled, and has a sturdy packaging format. The light weight and recyclability of aluminum makes wine in a can a more environmentally friendly packaging option.

The pharmaceutical packaging market has seen substantial growth, spurred on by an ageing population. With this industry, the demand for tamper-evident packaging is projected to increase. This technology is gaining popularity and new features are emerging. Sterile medical packaging is also expected to increase, encouraged by more stringent infection control standards.

Opportunities exist for U.S. companies in just about all forms of packaging, dictated by technologically advanced materials, design, and pricing. Cost effective recyclable and/or biodegradable packaging materials present ongoing interests.

Key Suppliers

Local Production

Increased concentration and consolidation have been the hallmarks of the Australian packaging industry over the last decade. Industry sources believe this trend will continue and probably intensify.

The three major packaging manufacturers in Australia are Amcor, Visy Industries (VisyBoard, VisySpecialties, VisyPak, VisyPaper), and ACI Packaging.

Following these market leaders is a cluster of mid-range firms serving various industry sectors. These include Tetra Pak, Detmold, Carter Holt Harvey, Huhtamaki, Cryovac, Aperio, Innovio Films, Vicpac Industries, Detmark Poly Bags, Andrew Kohn Pty. Ltd., Gelpack Enterprises, Irwin & Sheehan, Morris McMahon, and National Can Industries.

The degree of concentration of the Australian packaging industry can be seen from the following:

- ❑ *Glass Containers* – Up until 2002, there was just one glass container producer (ACI) in Australia. However, Amcor now produces wine bottles from its Gawler (South Australia) plant.
- ❑ *Corrugated Boxes* – Two companies (Amcor and VisyBoard/VisySpecialties) account for the majority of corrugated boxes produced in Australia.
- ❑ *Aluminum Cans* – Two companies (Amcor and VisyPak) produce all the aluminum cans manufactured in Australia.

❑ *Liquid Paperboard Cartons* – VisyPak is the prime producer of these cartons in Australia. TetraPak also supplies the market, but their cartons are not made in this country.

❑ *Steel Cans* – Six companies produce steel cans, drums, aerosol containers, and a general line – Amcor, Huhtamaki, Irwin & Sheehan, Morris McMahon, National Can Industries, and VisyPak.

❑ *Plastics* – Overall, the least concentrated packaging material sector although in some sectors, for example PET bottles, there are relatively few producers. They include ACI, Coca-Cola Amatil, and VisyPak.

At President Clinton's Clinton Global Initiative (CGI) meeting in New York on September 26, 2007, Visy's U.S. operation, Pratt Industries USA, made a \$1 billion commitment towards investment in paper recycling and waste-to-energy infrastructure. The money will enable the construction and operation in the U.S. of at least three new paper recycling mills, four waste-to-energy plants, and 30 MRFs (materials recovery facilities), as well as ancillary packaging plants to fully integrate the paper mills. Most importantly, it will save hundreds of thousands of tons of carbon dioxide from going into the air during the first half of the 10-year commitment period and more than one million tons per annum by the end of the decade. Pratt Industries USA is the largest Australian owned employer in the U.S. with over 3,200 American employees. With this \$1 billion commitment, those numbers will go even higher.

Imports

Australian produced materials supply most of the demand generated within the packaging industry. However, local production still allows a certain margin opening for import growth. While imports stem from many different countries, the main forces are China (46.6 percent share), New Zealand (13.1 percent), the U.S. (9.5 percent), and Malaysia (8.4 percent). The combination of a monopoly by Australian manufacturers and low cost production from Asia is the reason for the low U.S. market share.

In 2006, imports of packaging materials were valued at A\$781.6 million (US\$590.8 million). These comprised:

- ❑ Plastic packaging
- ❑ Paper or paperboard cartons, boxes, cases, and bags
- ❑ Sacks and bags of paper, paperboard and other materials
- ❑ Miscellaneous packing containers
- ❑ Glass bottles, flasks, jars, pots, phials
- ❑ Aluminum containers and casks
- ❑ Closures
- ❑ Paper/paperboard trays, dishes, and plates

Imports from China in 2006 were valued at A\$364.8 million (US\$275.7 million), up by 23 percent on the previous year. China is the leading supplier of almost all packaging categories. The exceptions are plastic closures, where the U.S. is the dominant source; paper/paperboard trays, dishes and plates (Indonesia); and aluminum cans and casks (the Netherlands and Indonesia).

In 2006, imports from the U.S. were valued at A\$74.3 million (US\$56.1 million), an increase of 5.5 percent on 2005. The U.S. was strongest in imports of the following products:

- ❑ Plastic closures
- ❑ Paper or paperboard cartons, boxes, cases, and bags
- ❑ Plastic containers (boxes, bags, etc)

At an overall 9.5 percent import market share, the U.S. is in a stable position with an outlook for increased market share, mostly due to the U.S. dollar's weakness relative to the Australian dollar. Corrugated cartons is a category where the U.S. is already making strong inroads. Imports of these products in 2006 increased by 299.8 percent over 2005 and by 56.1 percent in the six months to June 2007 compared to the corresponding period of the

previous year. Plastic bottles, flasks and similar items are other categories showing good growth, up by 20.1 percent in 2006 from 2005. The current strong performance of the Australian dollar vis-à-vis the U.S. dollar augurs well for higher imports to this market.

New Zealand and Malaysia are the nearest competitors for U.S. suppliers. In 2006, imports from New Zealand were valued at A\$102.8 million (US\$77.7 million) for a 13.1 percent import market share. Malaysia had A\$65.8 million (US\$49.8 million) with 8.4 percent. New Zealand led in imports of plastic sacks, bags, and other articles other than polyethylene. Malaysia was strongest in polyethylene sacks and bags, also corrugated paper cartons, boxes, and cases.

Prospective Buyers

The food, beverage, and pharmaceutical manufacturing industries are the major end-users of cartons, bottles, cans, plastic containers, and other converted packaging materials.

Latest available data from the Australian Bureau of Statistics (2005-06) indicates the food processing industry, excluding beverages, is worth around A\$69.8 billion (US\$52.7 billion). Australia's food requirements are mainly met from local production. There are approximately 4,000 food manufacturers in Australia, with large multinational firms dominating the industry.

Beverage production in Australia (2005-06) is estimated to be worth A\$11.1 billion (US\$8.3 billion). Most of Australia's requirements are met from local production but there is a reasonable level of imports of spirits and mineral waters, some of which are bottled locally. Wine production has been a major growth industry in Australia over the last 10 years, due primarily to the rapid expansion of export markets. During the year ended June 30, 2006, 1.4 million liters of wine were produced. Beer and soft drink manufacturing are also major activities.

Wine is generally packed in glass bottles, while larger bulk wine packs are either glass flagons, casks (bag in box) or plastic bags. Beer for retail sale is usually in bottles or cans, with about 70 percent in bottles. Carbonated soft drinks are packaged in metal cans, glass bottles, or plastic bottles. The trend is away from metal and glass to PET bottles. About 70 percent of carbonated drinks are packed in plastic or glass bottles.

International companies dominate the pharmaceutical industry in Australia, with all the majors actively involved. There are about 200 manufacturers and suppliers, and the top ten accounts for about 65 percent of the prescription pharmaceutical market. The Australian pharmaceutical market is worth approximately A\$8 billion (US\$6.4 billion).

Market Entry

Independent distributors are the main channels through which imported packaging materials are marketed in Australia, and they normally seek distribution rights for the whole of Australia.

The standard forms of trade finance are all prevalent and widely used in Australia. Financing between suppliers and importers of products is open to negotiation between the parties concerned. Generally, payment terms of between 30-60 days are considered the norm for small-to-medium consignments and up to 90 days for large volume purchases, contracted on a letter of credit or sight draft basis.

Market Issues and Obstacles

The Free Trade Agreement between the U.S. and Australia (AUSFTA) has eliminated the import duty on packaging materials from the U.S.

There is a 10 percent Goods and Services Tax (GST) on the sale or provision of most goods and services consumed in Australia. The levy is calculated on the value of the taxable import (VOTI) that is the cost of the product, plus freight and insurance for shipping the product to Australia.

An inordinate number of technical standards applies to various forms of packaging materials, including the following:

AS1079.1,2,3,5	Packaging of items (sterile) for patient care
AS1599	Pressure-sensitive adhesive packaging tapes
AS2400.1	Glossary of packaging terms
AS2400.5	Metal protection packaging
AS2400.6	Paper and paperboard packaging
AS2400.7	Timber box packaging
AS2400.8	Textile bags, sacks, and wrappings
AS2400.9	Metal containers, steel drums
AS2400.10	Packaging, protection against shock and vibration – cushioning
AS2400.11	Packaging, cordage
AS2400.13	Packaging, tensional strapping
AS2400.14	Adhesives
AS2400.16	Flexible packaging
AS2400.18	Use of desiccants in packaging
AS2400.21	Packaging of dangerous goods
AS2400.22	Closures
AS2609.1, 2	Materials used for the packaging of food and beverages
DR02375	Packaging for surface transport of biological materials

Detailed information on requirements is available from:

Standards Australia
Level 10, The Exchange Centre
20 Bridge Street
Sydney NSW 2000
Telephone: (61-2) 9237 6000
Fax: (61-2) 9237 6010
Website: <http://www.standards.org.au/>

For information on labeling regulations for food and beverage products, please contact:

Food Standards Australia New Zealand (FSANZ)
Boeing House
55 Blackall Street
Barton, Australian Capital Territory 2600
Telephone: (61-2) 6271 2222
Fax: (61-2) 6271 2278
Website: <http://www.foodstandards.gov.au/>

Trade Events

Event Name: AUSPACK 2009
Date: Early June 2009
Location: Sydney Showground, Sydney Olympic Park
Website: <http://www.auspack.com.au/>
Email: auspack@etf.com.au

Resources and Key Contacts

Packaging Council of Australia	http://pca.org.au/
Packaging Institute of Australia	http://www.aipack.com.au/
The National Packaging Covenant	http://www.packagingcovenant.org.au/
CSIRO	http://www.csiro.au/
"PKN Packaging News" Publication	http://www.yaffa.com.au/
"Packaging" Publication	http://www.reedbusiness.com.au/index.htm

For More Information

The U.S. Commercial Service in Sydney, Australia can be contacted via e-mail at: Patricia.Matt@mail.doc.gov; Phone: (61-2) 9373 9211; Fax: (61-2) 9221 0573 or visit our website: www.buyusa.gov/australia/en

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